

## ABSTRACT

An electronic warfare apparatus for determining the location of for example a ground based source of electromagnetic radiation from a platform such as an aircraft. Location is determined using angle of arrival based vector determinations provided by signal differences detected in the ground based signals arriving at platform antennas. Elimination of angle of arrival errors arising from imprecise knowledge of platform electronic warfare antenna characteristics is a focal point of the invention and is accomplished through precision use of global position system information received via the same electronic warfare antennas. Accurate determination of electronic warfare antenna characteristics prior to consideration of the large distance multiplication factors imposed by aircraft to distant signal source geometry enables accurate distant signal source location using the invention.